WHAT IS CLAIMED IS:

5

     1. A method of reserving a transmission band of a transmission line for transmitting data via a plurality of Internet service providers on the Internet between first and second communication

10   devices, the method comprising the steps of:

     (a) the first communication device requesting an intermediary server to reserve the transmission band; and

     (b) the intermediary server reserving the

15   transmission band for the first and second communication devices.

20

     2. The method as claimed in claim 1, wherein the first communication device transmits IP addresses of the first and second communication devices, IP addresses of routers on the transmission

25   line, and a desired band value to be reserved to the intermediary server.

30

     3. The method as claimed in claim 2, wherein the intermediary server identifies band reservation setting servers for the routers from the IP addresses thereof, the band reservation setting

35   servers causing their respective routers to reserve the transmission band.

4. The method as claimed in claim 3, wherein the intermediary server identifies the band reservation setting servers by referring to a table on which IP addresses of the band reservations servers are recorded so as to be correlated with those of their respective routers.

5. The method as claimed in claim 3, wherein the band reservation setting servers cause their respective routers to reserve the transmission band in accordance with band setting requests transmitted from the intermediary server.

6. The method as claimed in claim 3, further comprising the steps of:

(c) the first communication device requesting the intermediary server to release the reserved transmission band; and

(d) the intermediary server releasing the reserved transmission band.

7. The method as claimed in claim 6, wherein the intermediary server instructs the band reservation setting servers to release the reserved transmission band.

8. The method as claimed in claim 7, wherein the band reservation setting servers cause their respective routers to release the reserved transmission band in accordance with band release

5   requests transmitted from the intermediary server.

10   9. The method as claimed in claim 2, wherein the intermediary server, instead of the desired band value, utilizes an ID of one of the Internet service providers to which one the second communication device is connected and IP addresses

15   of communication devices connected to the one of the Internet service providers, the ID and the IP addresses being transmitted from the one of the Internet service providers.

20

10. The method as claimed in claim 9, wherein the desired band value is a transmission

25   rate at which the second communication device is connected to the one of the Internet service providers.

30

11. The method as claimed in claim 10, wherein the intermediary server transmits an inquiry about the transmission rate to the one of the

35   Internet service providers.

12. The method as claimed in claim 11, wherein the one of the Internet service providers responds to the inquiry from the intermediary server.

5

13. The method as claimed in claim 1, wherein the first communication device transmits IP addresses of the first and second communication devices, and IP addresses of routers on the transmission line to the intermediary server.

10

15

14. The method as claimed in claim 1, wherein a desired value of the transmission band is a transmission rate at which the second communication device is connected to a corresponding one of the Internet service providers.

20

25

15. The method as claimed in claim 14, wherein the intermediary server transmits an inquiry about the transmission rate to the corresponding one of the Internet service providers.

30

16. The method as claimed in claim 15, wherein the corresponding one of the Internet service providers responds to the inquiry from the intermediary server.

35

17.   The method as claimed in claim 1, wherein:

the second communication device is connected to one of the Internet service providers which one includes a copy server having a copy of a content distributed by the first communication device; and

the first communication device, based on a request of the second communication device for the content, informs the copy server that the content is distributed from the copy server to the second communication device by reserving a transmission band therebetween.

18.   The method as claimed in claim 17, wherein the copy server transmits an IP address thereof, an IP address of the second communication device, a desired band value to be reserved, and IP addresses of all routers between the copy server and the second communication device to the intermediary server.

19.   A method of reserving a transmission band of a transmission line for transmitting data via a plurality of Internet service providers on the Internet between first and second communication devices in compliance with an RSVP, the method comprising the steps of:

(a) the first communication device transmitting data including an ID of the first communication device to the second communication

device through routers on the transmission line;

    (b) the second communication device transmitting to the routers an instruction with the ID to reserve the transmission band; and

5   (c) the routers reserving the transmission band.

10

    20.   The method as claimed in claim 19, wherein the routers prestore the ID.

15

    21.   The method as claimed in claim 19, wherein the second communication device prestores a value of the reserved transmission band and includes

20   the value in the instruction.

25   22.   The method as claimed in claim 19, wherein the routers record data on a usage of the RSVP with the ID.

30

    23.   The method as claimed in claim 19, further comprising the step of (d) an intermediary server issuing the ID under contracts with the

35   Internet service providers including the routers and the first communication device using the RSVP to pay for a usage of the RSVP.

24.   The method as claimed in claim 23, further comprising the step of (e) the intermediary server, when informed of the usage of the RSVP from the Internet service providers, generating a trigger to pay the Internet service providers for the usage of the RSVP and a trigger to bill the first communication device for the usage of the RSVP.

25.   The method as claimed in claim 24, wherein the intermediary server specifies the first communication device based on the ID issued thereto in generating the trigger to charge the first communication device.

26.   A device for reserving a transmission band of a transmission line for transmitting data via a plurality of Internet service providers on the Internet between first and second communication devices, wherein:

the transmission band is reserved at a request of the first communication device to reserve the transmission band.

27.   A device for reserving a transmission band of a transmission line for transmitting data via a plurality of Internet service providers on the Internet between first and second communication devices, the device comprising:

a first part storing IP addresses of servers of the Internet service providers, the servers reserving the transmission band;

a second part storing a request of the first communication device to reserve the transmission band; and

a third part storing results of reservations of the transmission band, the results being returned from the servers,

wherein the device, upon receiving the request of the first communication device, refers to the first and second parts to instruct the servers to reserve the transmission band, recording the results of the reservations returned from the servers, and informing the first communication device whether a reservation of the transmission band is confirmed.